MEDICAL WASTE IN THIMPHU, BHUTAN

There are 5 medical service centers within Thimphu municipality: two Indian hospitals (DANTAK hospital at Semtokha and IMTRAT hospital in the main town), the Royal Government medical services (Jigme Dorji Wangchuck National Referral (JDWNR) hospital, the BHU in Dechencholing) and the Outreach Clinic in Motithang. Medical waste especially the infectious waste management is always given close attention in the national health policy and the 3rd edition of the Guideline for infection control and health care waste management in health facilities, developed by the Infection Control & Health Care Waste Management Program, Department of Medical Services, Ministry of Health, Thimphu in 2006 has addressed specifically under chapter 8, the "handling of wastes at health care facilities". A brief on the findings from the guideline is reported here in this case study report.

Details for Process/Operation and Management

The handling of wastes at Health Care Facilities (HCFs) chapter in the Guideline for Infection Control and Health Care Waste Management in health facilities considers 4 types of wastes as described below:

- 1. Infectious waste in the form of sharps-Yellow/White: items that include those that can cause cuts or puncture wounds whether infected or not are considered hazardous and potentially infectious. In the management, it is made mandatory to segregate, pack and in safety boxes like previously containing drugs or pharmaceuticals and autoclave wherever possible prior to deep burial pits disposal.
- 2. Other types of infectious waste-Red: that are susceptible to contain pathogens in sufficient concentration to cause diseases to a potential hosts such as discarded materials or equipments from diagnosis, treatment and prevention including dressing, swabs, sanitary towels, blood bags, feces, urine, body fluids, sputum or lung secretions. Such wastes are to be collected in red-colored dustbins or plastic bags of thickness: 0.1 mm. When the dustbin is $3/4^{\text{th}}$ full, it should be autoclaved prior to disposal into the municipal waste bins.
- **3. Non-infectious wastes** including office waste, cloth, paper, plastics, glass and bottles, decontaminated media and lab ware, Styrofoam, cans which cannot be recycled and uncontaminated bedding is directly disposed into municipal waste bins and encouraged to recycle them.
- **4. Food waste** to be collected in Blue bins is encouraged to be collected by end-users for cattle and other domestic animal feeds.

Concluding Remarks

Health care waste is a serious concern and all the HCFs throughout the country are made mandatory to manage the health care wastes with safety. The HFC officials were trained alternatively or in batches as training of trainers to outreach the waste management knowledge/techniques to the HCF support staff. While techniques designed in the guideline is in accordance to the grassroots resources and the capacity for realistic implementation, monitoring of the sharps destroyer and autoclaving of the infectious wastes needs close monitoring scheme.

MEDICAL WASTE CASE STUDY-THIMPHU, BHUTAN



Ministry of Health



Jigme Dorji Wangchuck National Referral (JDWNR) Hospital: partially under construction



JDWNR Hospital



Foot Pedal Waste Bins in Hospital Corridors



Non-Infectious Separated Waste for Disposal

Source: Ms. Sonam Wangmo, Program Officer, Department of Medical Services, Ministry of Health

Contact details: Thimphu. Tel: +975-2-328091/328092/328093/321842 Mobile: +975-17601973

Email: sonamwangmo@health.gov.bt

Prepared by: Yeshey Penjor (st104168@ait.ac.th or YPenjor@gmail.com)